

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013020**Date Inspected:** 07-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Liu Hua Jie

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. He Hanbi, stencil 202122 has used flux cored welding procedure WPS-B-T-2133 to make OBG welds DP3063-001-074 and DP3063-001-075. This QA Inspector observed QC has recorded a welding current of 214 amps and 34.5 volts. This QA Inspector observed Mr. He Hanbi appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Yaobing, stencil 204730 has used flux cored welding procedure WPS-B-T-2133 to make OBG segment welds DP3063-001-096 and -097. This weld is located at OBG segment 12BW. This QA Inspector observed ZPMC QC has recorded a welding current of 206 amps and 24.5 volts. Items observed on this date appeared to generally comply with applicable contract documents.

ZPMC issued "Inspection Notification Sheet" number 5484 informing QA that ZPMC has completed ultrasonic

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## WELDING INSPECTION REPORT

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inspections of various OBG corner assembly welds. This QA Inspector performed random visual and ultrasonic inspections of approximately 50% length of the following welds: CA74-031, CA74-032, CA77-049, CA77-050, CA59-033, CA59-034, SEG059D-001, SEG059D-006, SEG063E-024 and SEG063E-029. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report and the photograph below.

ABF issued "Inspection Notification Sheet" number 04072010-1 item #1 informing QA that on 4-07-2010 at 19:00 hours ABF Inspectors will be performing ultrasonic (UT) inspections of repaired hold back weld CA040-002 which joins the deck plate and edge plate on the bikepath side of OBG 7CE. This weld is located in the trial assembly area. This QA Inspector was informed by ABF/Sense UT Inspectors that this weld is UT acceptable. This QA Inspector performed ultrasonic inspections at the twenty weld repair locations as listed on the UT report data sheets for detection of longitudinal and planar transverse indications utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and no UT rejections were observed. Items observed on this date appeared to generally comply with applicable contract documents. Note: These inspections are being documented and tracked on "Verification Witness Request" documents and no TL-6027 UT report was issued for these inspections.



### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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